CLAIMS

1. An emergency lighting function illumination appliance comprised of:

an illumination appliance;

a mains power circuit that receives mains power and processes the said mains power appropriately to drive the said illumination appliance;

a backup circuit that processes a backup power source (a rechargeable battery) is capable of driving the said illumination appliance;

a controller connected between the said illumination appliance and both the said mains power circuit and said backup circuit, the said controller comprised of a control unit and a selection unit. The said control unit having a switch and when the said switch is momentarily pressed and released, the said control unit outputs different level control signal, and the said selection unit, based on the presence or absence of mains power, determines whether the circuit of the said illumination appliance is connected to either the said backup circuit or the said mains power circuit; the said selection unit has four relays, each said relay has two input pins, one selection pin, and one output pin, wherein the said output pins of the said first and second relays are respectively connected to the two input pins of the said illumination appliance, one said input pin is respectively connected to the output pin of the said backup circuit,

the other said input pin is connected to the said output pins of the said third and fourth relays, the said input pins of the said third and fourth relays are respectively connected to the two output pins of the said mains power circuit and, furthermore, the said selection pins of the said first and second relay are connected to the said mains power and when mains power is being supplied, the said output pins of the said first and second relays are connected with the said output pins of the said third and fourth relays that are connected to the said input pins, and during mains power outages, the said output pins of the said first and second relays are connected with the said backup circuit output pins that are connected to the said input pins, thereby enabling the said backup circuit backup power source to supply power to the said illumination appliance; when mains power is normally supplied and the said selection pins of the said third and fourth relays receive control signals outputted from the said control unit, and the said control signal is of a high level, the said output pins of the said third and fourth relays are connected to the said two output pins of the mains power circuit and thereby input the said mains power; when the said control signal is of a low level, the said output pins of the said third and fourth relays are toggled into connection with the other said input pin and no power is inputted; when the said mains power fails, the said controller connects the said illumination appliance to the said backup circuit such that it receives the said

backup power source for emergency lighting, and when the said mains power is normally supplied, the said controller, based on user purposes, controls the said illumination appliance to accept power processed by the said mains power circuit to thereby switch it on or not accept any power to thereby leave it switched off.

2. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said control unit switch is an always on switch and the said control unit has a D type flip-flop that is utilized to output the said control signals to the said selection unit.

3. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said control unit has an Smith trigger amplifier connected between the said switch and the said D type flip-flop.

4. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said mains power circuit is comprised of an AC-to-DC converter circuit that receives the said mains power and an oscillator circuit between the said AC-to-DC converter circuit and the said control unit.

5. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said battery of the said backup circuit is a rechargeable battery.

6. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said backup circuit is also comprised of a direct current oscillator circuit and a charging circuit between the said battery and the said controller.

7. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said mains power circuit is a conventional ballast device and a starter is added to the said fluorescent lamp tube power input pin.

8. As mentioned in Claim 1 of the emergency lighting function illumination appliance of the invention herein, the said illumination appliance is a low-voltage light bulb or an light-emitting diode (LED), a transformer receives mains power and processes the said mains power appropriately and later outputs it to drive the said illumination appliance. The backup circuit can include a rechargeable battery, a backup circuit capable of outputting the

appropriate power to drive the said illumination appliance, and the said controller is connected among the said illumination appliance, the said transformer and the said backup circuit .